EAST CONTRA COSTA COUNTY

Automated Transit Network

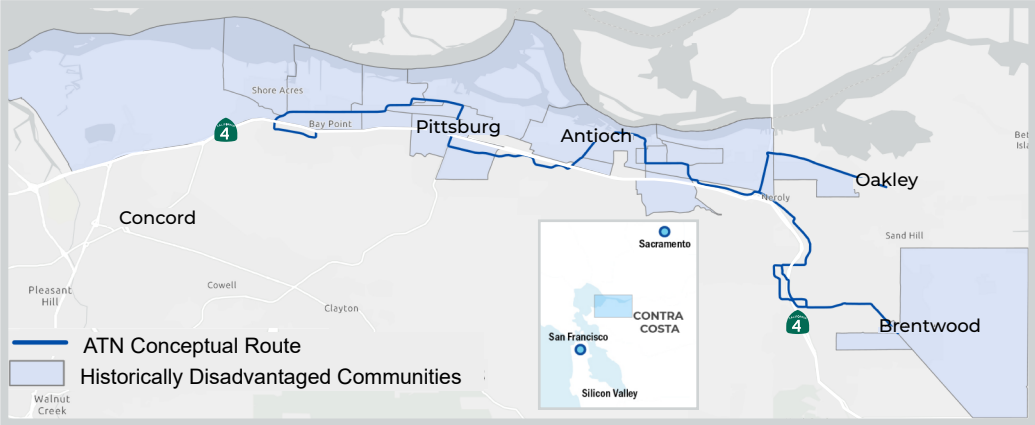
PURPOSE AND NEED

East Contra Costa County (ECCC), located in the San Francisco Bay Area, provides affordable housing but lacks sufficient local job opportunities. This leads 79% of residents to commute to job-rich employment hubs like San Francisco and Silicon Valley, via State Route 4 (SR4), subjecting travelers to substantial traffic during peak hours. The resulting congestion, heightened greenhouse gas emissions, and longer travel times consistently rank SR4 among the top 10 most congested corridors in the region[1].

There is also a pressing need for improved intra-region connectivity post-Covid. While transit options exist, reliable first/last mile connections to existing transit services are needed to better serve local communities, especially the 19 underserved Historically Disadvantaged Communities (HDC) that make up about 50% of ECCC. Congestion in the area is only projected to increase due to rapid growth and development in more rural areas to the east.

BACKGROUND

The ECCC Automated Transit Network (ATN) Project is a multi-city, on-demand, automated transit option designed to meet the diverse mobility needs of people in ECCC. In Spring 2021, the cities of Antioch, Brentwood, Oakley and Pittsburg completed a Feasibility Study (Study) to support potential deployment of an ATN. The Study concluded that implementation of the technology would deliver substantial benefits to the region. Subsequently, the Contra Costa Transportation Authority (CCTA) and Tri Delta Transit (ECCC local bus operator) partnered to further advance the Project.



[1] Based on 2017 data from MTC's annual analysis of weekday freeway congestion summary.

- SUPPORT ECONOMIC DEVELOPMENT AND CREATE NEW JOBS
- CONGESTION RELIEF AND REDUCED CARBON EMISSIONS
- INCREASED TRANSIT ACCESSIBILITY FOR UNDERSERVED COMMUNITIES
- FIRST/LAST MILE CONNECTIVITY
- COST EFFECTIVE, SCALABLE, AND SUSTAINABLE
- PUBLIC-PRIVATE PARTNERSHIP (P3) OFFERS FUNDING FLEXIBILITY AND LEVERAGING OF PRIVATE FUNDS

CONTRA COSTA transportation authority

TRI DELTA TRANSIT

THE TECHNOLOGY

As a core mobility solution of East County Connection Partners (ECCP), Glydways is an automated transit solution that provides on-demand, high capacity service moving riders in purpose-built electric vehicles on narrow and lightweight fixed guideways. It enhances transit users' experience by providing on-demand, direct-to-destination trips, predictable travel times, and small group rides, aiming to shift travel from personal cars and reduce vehicle miles traveled (VMT).

The Glydways system has a smaller physical and carbon footprint, making it less intrusive and impactful. It also means the infrastructure costs significantly less to build, contributing to a more sustainable economic model.

GoMentum Station, known for its commitment to connected and automated vehicle safety, was chosen as the ideal site for deployment of a prototype ATN system. This system is currently operational at Glydways' research and development facility.

SEGMENT 1

As ECCC's population grows, infrastructure must keep pace. Anticipating housing needs and planning for access to job opportunities ensures vibrant communities. Segment 1 of the ECCC ATN will extend Bay Area Rapid Transit (BART) regional rail from Antioch BART station to the Brentwood Innovation Center and augment the existing local Tri Delta Bus service, connecting to the future Tri Delta Mobility Hub. In addition, it will support future planned Transit-Oriented Developments (TOD) in Brentwood to enhance accessibility and equity. Diversifying transportation options beyond cars ensures all residents can access jobs, services, and recreational activities.

PROJECT DELIVERY MILESTONES

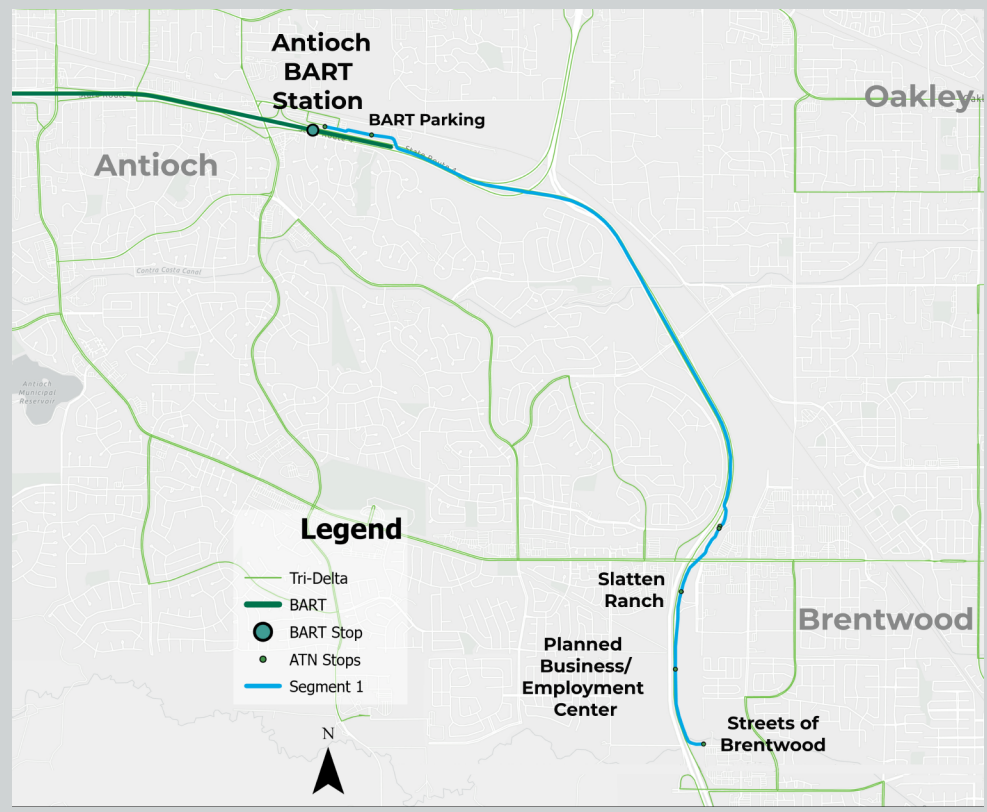
SPRING 2021
Feasibility Study Completed

SEPTEMBER 2023
P3 Contract Executed
Contract awarded to East County Connection Partners, LLC (ECCP), a partnership between Plenary Americas, Glydways, and Flatiron.

FEBRUARY 2024
Initial Viable Segment Identified

SPRING 2024
Update Costs and Ridership projections for the Initial Viable Segment

TBD*
Environmental Clearance and Design
(*based on funding identification)



PROPOSED SEGMENT 1 ROUTE

- Connection to BART regional rail
- Augments local Tri Delta bus service
- Supports future TODs
- Accommodates population growth in Antioch and Brentwood
- Reduces Daily VMT
- Alleviates parallel congestion on SR4
- Enhances accessibility and equity